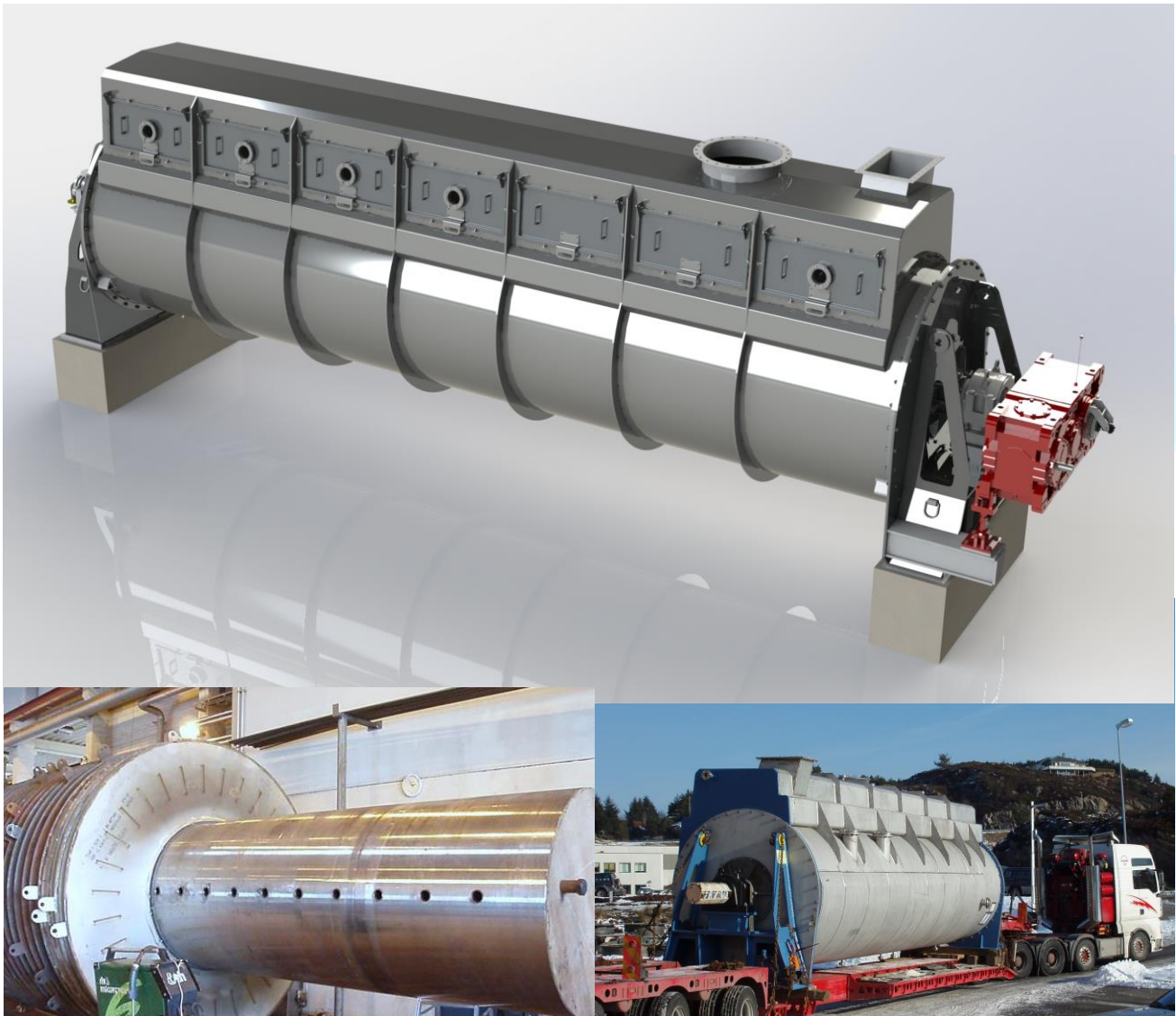


DATA SHEET FJELL TURBO DISC DRIER



The Fjell Turbo Disc Drier is an indirectly heated drier for:

- Sludge in Waste Water Treatment Plants
- Fishmeal in both land based and ship installed plants
- Ingredients in the food industry
- Spent grains in distilleries and breweries
- Animal and poultry by products
- Industrial bio-sludge and mineral sludge

The drier has a unique durable patented rotor design without traditional welded stays exposed to tear, wear, fatigue and corrosion. Driers can be supplied in all practical sizes, in all common materials of construction (carbon-, stainless-, and duplex steels), and approved and inspected according to the leading international design codes and standards (PED, ASME, JIS, GOST, DNV, Lloyds, Bureau Veritas etc.).

Legacy

When Atlas-Stord in the year 2000 closed down disc drier manufacturing in Norway after almost 50 years, we engaged senior personnel with 150 year experience from design, manufacturing and commissioning of more than 2000 disc driers all over the world. We took over robotic disc welding equipment from Atlas-Stord’s workshop, and added a dash of innovative young engineering resources using state of the art design and analysis techniques. The result was the **Fjell Turbo Disc Drier** with a unique durable design of the stays providing the strength towards internal steam pressure, efficient manufacturing techniques, and optimised flow of material and vapour for maximum heat exchange.

Design Features

The **Fjell Turbo Disc Drier** is designed for heating by steam (6-10 bar), hot water or thermal oil. The largest heating surface is the rotor, but additional heating surface is available as an option on the stator. The product to be dried is slowly, but vigorously, transported from inlet- to outlet end by a paddle system mounted on the disc periphery. Product discharge is normally done continuously by a speed

controlled extraction screw conveyor. The discs are mounted on a heavy central shaft with a highly efficient condensate removal system integrated. Scraper bars ensure agitation between the discs, which is necessary for efficient evaporation. The moisture evaporated from the product is collected in a high top vapour dome, and continuously removed.

Scope of Supply

- ✓ Turbo Disc replacement rotors for existing disc drier installations from all recognised OEMs.
- ✓ Complete Fjell Turbo Disc Driers with all necessary auxiliary equipment.
- ✓ Complete key ready process plants including feed hoppers, grinders, conveyors, pumps, steam/condensate equipment, vapour and dust handling systems, product discharge, pellets mills, storage and bagging systems.
- ✓ Associated process equipment like evaporators, coagulators, presses, decanters, tricanter and separators.
- ✓ All driers can be designed for vacuum drying.
- ✓ All small driers up to TD140-1500 can be delivered for food processing meeting EHEDG guidelines.

Standard range of Fjell Turbo Disc Driers

Model		Heating surface		Overall dimensions	Appr. weight	Drive unit
<i>cold stator</i>	<i>hot stator</i>	<i>rotor</i>	<i>stator</i>	<i>length x width x height</i>	<i>dry</i>	
TD30 ¹ -900 ²	TD35-900	30 m ²	5 m ²	5.0 m x 1.2 m x 1.5 m	7 ton	11 kW
TD40-1100	TD50-1100	40 m ²	10 m ²	5.1 m x 1.4 m x 1.7 m	9 ton	18 kW
TD65-1100	TD75-1100	65 m ²	10 m ²	6.1 m x 1.4 m x 1.7 m	11 ton	22-30 kW
TD90-1500	TD110-1500	100 m ²	15 m ²	6.5 m x 1.9 m x 3.6 m	18 ton	37-55 kW
TD120-1500	TD140-1500	130 m ²	20 m ²	7.8 m x 1.9 m x 3.6 m	23 ton	45-75 kW
TD160-1700	TD180-1700	170 m ²	20 m ²	9.6 m x 2.1 m x 2.6 m	33 ton	55-90 kW
TD200-1700	TD225-1700	220 m ²	25 m ²	11.1 m x 2.1 m x 2.6 m	41 ton	75-110 kW
TD250-1900	TD280-1900	250 m ²	30 m ²	11.7 m x 2.4 m x 3.0 m	46 ton	75-110 kW
TD300-1900	TD330-1900	300 m ²	30 m ²	13.3 m x 2.4 m x 3.0 m	52 ton	90-132 kW
TD400-2200	TD440-2200	400 m ²	40 m ²	14.5 m x 2.7 m x 3.4 m	69 ton	110-160 kW
TD500-2600	TD550-2600	500 m ²	50 m ²	14.2 m x 3.0 m x 3.6 m	82 ton	132-200 kW
TD600-2600	TD650-2600	600 m ²	50 m ²	16.4 m x 3.0 m x 3.6 m	94 ton	160-200 kW

¹Indicates nominal total heating surface, ²indicates nominal disc diameter.